#### **RAJYA SABHA**

(b) The number of Workshed/Workshed-cum-Houses sanctioned to different State Governments during the last five years is given below. The Government intends to continue the Scheme in the next Five Year Plan also.

| Sl.No. Name of the State |                   | Number of Units<br>Sanctioned |
|--------------------------|-------------------|-------------------------------|
| 1.                       | Andhra Pradesh    | 11166                         |
| 2.                       | Arunachal Pradesh | 1209                          |
| 3.                       | Assam             | 2799                          |
| 4.                       | Bihar             | 2500                          |
| <b>5</b> .               | Himachal Pradesh  | 1923                          |
| 6.                       | J&K               | 364                           |
| <b>7</b> .               | Karnataka         | 8285                          |
| 8.                       | Kerala            | 1930                          |
| 9,                       | Madhya Pradesh    | 2168                          |
| 10.                      | Maharashtra       | 4030                          |
| 11.                      | Manipur           | 5096                          |
| 12.                      | Meghalaya         | 193                           |
| 13.                      | Mizoram           | 320                           |
| 14.                      | Nagaland          | 6292                          |
| 15.                      | Orissa            | 6944                          |
| 16.                      | Rajasthan         | 3535                          |
| 17.                      | Sikkim            | 1000                          |
| 18.                      | Tamil Nadu        | 7352                          |
| 19.                      | Tripura           | 1330                          |
| <b>20</b> .              | Uttar Pradesh     | 2700                          |
| 21.                      | West Bengal       | 5500                          |

# WRITTEN ANSWERS TO STARRED AND UNSTARRED QUESTIONS SET FOR THE 5TH MARCH, 2001\*

# High rise buildings in the capital

- \*141. SHRI SWARAJ KAUSHAL: Will the Minister of URBAN DEVELOPMENT AND POVERTY ALLEVIATION be pleased to state:
- (a) whether Government are aware that some of the high rise buildings in the Capital may collapse in the event of an earthquake causing loss of life and property; and

<sup>\*</sup> The sitting of the Rajya Sabha on Monday, the 5th March, 2001 was cancelled. Answers to Questions put down in the lists for that day were laid on the Table of the House on Wednesday, the 7th March, 2001.

(b) if so, the names of such buildings and locations (like address etc.) which may collapse in the event of an earthquake?

THE MINISTER OF URBAN DEVELOPMENT AND POVERTY ALLEVIATION (SHRI JAGMOHAN): (a) and (b) Delhi is in Seismic Zone IV as per zoning map prepared by the Bureau of Indian Standards. Safety aspect of buildings in Delhi is governed by the Building Bye-laws which take care of the structural safety of the buildings constructed/proposed to be constructed. These Building Bye-laws are regulated and implemented through various agencies like the DDA, MCD and NDMC. The Ministry of Urban Development and Poverty Alleviation has also been emphasising the need for strictly curbing any violation of the Building Bye-laws by any person or persons and has been stressing upon the local bodies/authorities to take action as per-Rules and Acts against unauthorised construction. However, to provide for requisite safety measures in construction of buildings in Delhi in respect of natural hazards by way of earthquake, a public notice has been issued on February 1, 2001 proposing suitable modifications/additions in Clause 18 of Part III (Structural Safety and Services) of the Building Bye-laws, 1983. A copy of the same is given as Statement (See below).

The Central Public Works Department have informed that all buildings designed and constructed by it in Delhi have been designed and constructed as per relevant IS codal provisions applicable to Delhi to make them earthquake resistant. DDA have also informed that the buildings constructed by DDA itself adhere to the Bureau of Indian Standards norms. NDMC have reported that in NDMC area, structural stability certificate is taken from owner and Architect/Engineer for all buildings, including Multi-storey Buildings.

#### Statement

PUBLIC NOTICE

MINISTRY OF URBAN DEVELOPMENT AND POVERTY
ALLEVIATION
(DELHI DIVISION)
PUBLIC NOTICE

NEW DELHI, THE 01 FEBRUARY, 2001

The matter of making suitable provision in the Building Bye-Laws, 1983 to ensure that the buildings that are eracted in Delhi provide for the requisite safety features in respect of natural hazard by way of earthquake has been

under the consideration of Government. The following modifications/additions which the Central Government propose to make in the Building Bye-Laws, 1983 in this regard are hereby published for public information. Any person having any objection or suggestion may send the same in writing to the Under Secretary, Delhi Division, Ministry of Urban Development and Poverty Alleviation, Nirman Bhavan, New Delhi-110011 within a period of 30 days from the date of this notice. The person making the objection or suggestion should also give his name and address.

## Modification:

- (i) Clause 18 of Part-III (Structural safety and Services) of the Building Bye-Laws, 1983 will be modified as
  - "18. The structural design of foundation, masonary, timber, plain concrete, reinforced concrete, pre-stressed concrete and structural steel shall be carried out in accordance with Part-VI Structural Design, Section 1- Loads, Section 2-Foundation, Section-3 Wood, Section-4 Masonary, Section 5 Concrete, Section 6—Steel of national Building Code of India, taking into consideration the Indian Standards given in Statement-I (See below) for earthquake protection of buildings."

(Note: Whenever an Indian Standards or the National Building Code is referred, the latest provision in the Indian Standard should be adhered to.)

- (ii) An additional Sub-Clause is proposed to be added under Clause 6.2.9.
   (Documents to accompany application for building permit) of Building Bye-Laws as follows:
- (i) The certificate as indicated in Statement II (See below), to be signed by the owner and the architect."

(No. K-12016/5/79/DDIA/VA/IB)

Sd/-

R.C. Nayak, Under Secretary

## RAJYA SABHA

# Statement-I

List of Indian Standards/Guidelines for Hazard Safety
For Earthquake Protection

- 1. IS: 1893-1984 "Criteria for Earthquake Resistant Design of Structures (Fourth Revision)" June 1986. IS: 1893-1984.
- 2. IS: 13920-1993 "Ductile Detailing of Reinforced Concrete Structures subjected to Seismic Forces Code of Practice" November 1993.
- 3. IS: 4326-1993 "Earthquake Resistant Design and Construction of Buildings-Code of Practice (Second Revision)" October 1993.
- 4. 1S: 13828-1993 "Improving Earthquake Resistance of Low Strength Masonary Buildings-Guidelines" August 1993.
- 5. 18: 13827-1993 "Improving Earthquake Resistance of Earthen Buildings-Guidelines", October 1993.
- 6. IS: 13935-1993 "Repair and Seismic Strengthening of Buildings-Guidelines", November, 1993.

#### Statement-II

Certificates are to be submitted alongwith the building drawings while submitting the plans

- 1. Certified that the building plans submitted for approval satisfy the safety requirements as stipulated under para 18 and the information given therein is factually correct to the best of our knowledge and understanding.
- 2. It is also certified that the structural design including safety from natural hazards has been prepared by duly qualified structural engineer.

| Signature of Owner with date | Signature of the      |
|------------------------------|-----------------------|
| Name in Block Letters        | Architect with date   |
| Address                      | Name in Block Letters |
|                              | Address               |